

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/661,149	09/12/2003	Jason A. Ashton	PA2269US	6799	
22830	7590 01/24/2006		EXAMINER		
CARR & FERRELL LLP 2200 GENG ROAD			BODDIE, V	BODDIE, WILLIAM	
PALO ALTO, CA 94303			ART UNIT	PAPER NUMBER	
ŕ			2674	•	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/661,149	ASHTON, JASON A.				
Office Action Summary	Examiner	Art Unit				
	William Boddie	2674				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be time rill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	l. lely filed the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 12 Se	eptember 2003	•				
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	, , , , , , , , , , , , , , , , , , , ,					
4)⊠ Claim(s) <u>1-38</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-38</u> is/are rejected.	· <u> </u>					
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>12 September 2003</u> is/are: a)⊠ accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau	ı (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
		•				
Attachment(s)	,					
1) Notice of References Cited (PTO-892)	4) Interview Summary					
<ul> <li>2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	ate atent Application (PTO-152)					
Paper No(s)/Mail Date 3/1/04	6) Other:	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Croy et al. (US 6,040,829).

With respect to claim 1, Croy discloses, a remote control (fig. 3a) comprising: a mechanical data entry (230 in fig. 2) configured to control a video display system (140 in fig. 1), the mechanical data entry including a power control and channel control (on/off switch in fig. 3a; col. 17, lines 16-18); a multi-bit data sensor including a transducer configured to read data from a portable data repository (260 in fig. 2, also note col. 5, lines 35-45; reading of data as described inherently requires a transducer of some sort); a memory (222 in fig. 2) configured to store the read data (col. 6, lines 8-11) and information identifying the remote control (col. 4, lines 43-46); and an interface configured to transfer the read data and the identifying information from the remote control (210 in fig. 2, col. 5, lines 61-64).

With respect to claims 2, Cory discloses the remote control of claim 1 (see above), wherein the transducer is an electromagnetic transducer (col. 5, lines 39-42, discloses reading magnetic information off of a magnetic stripe, this inherently requires an electromagnetic transducer)

Art Unit: 2674

With respect to claim 4, Croy discloses, the remote control of claim 1 (see above), wherein the interface is a wireless interface (col. 4, lines 13-16).

With respect to claim 5, Croy discloses, the remote control of claim 1 (see above), further including a video display (fig. 1) configured for programming the remote control (col. 4, lines 47-58).

3. Claim 20-22, 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Erlin (US 5,973,756).

With respect to claim 20, Erlin discloses, a method of performing secure transmission of data, the method comprising the steps of: setting a multi-bit data sensor in a read mode (col. 4, lines 16-18), the multi-bit data sensor being included in a remote control (127 in fig. 7), the remote control being configured to control a video display system (fig. 1); reading data from a portable data repository using the multi-bit data sensor (col. 4, lines 19-25); transferring, using a wireless interface (129,131 in fig. 7), the read data from the remote control to the video display system (col. 5, lines 18-33); transferring the read data from the video display system to a third party (fig. 10); and authenticating the read data transferred from the video display system (col. 8, lines 56-59).

With respect to claims 21 and 22, Erlin discloses, the method of claim 20 (see above).

Erlin further discloses including encrypting the read data using a logic circuit (133 in fig. 7, col. 4, lines 38-40; note the inclusion of the logic circuit in the remote control thus satisfying claim 22).

Art Unit: 2674

With respect to claims 26 and 27, Erlin discloses, the method of claim 20 (see above), using the Data Encryption Standard (DES) to encrypt the read data using a DES logic circuit (133 in fig. 7).

Furthermore, the DES inherently requires the generation of a pseudorandom number for use in the encryption of the data.

With respect to claim 28, Erlin discloses, a method of entering secure data, the method comprising: setting a multi-bit data sensor in a read mode (col. 4, lines 16-18), the multi-bit data sensor (7 in fig. 7) being included in a remote control having a logic circuit (133 in fig. 7); disposing a portable data repository relative to the multi-bit data sensor (equivalent to swiping of the credit card of Erlin); reading data from the portable data repository using the multi-bit data sensor (col. 4, lines 19-25); encrypting the read data using the logic circuit (col. 4, lines 39-40); and transferring the encrypted data from the remote control (col. 5, lines 25-26).

With respect to claim 29, Erlin discloses, the method of claim 28 (see above), wherein the portable data repository is a credit card (col. 1, lines 61-67)

With respect to claim 30, Erlin discloses, a video display system configured for performing a secure transaction, the video display system comprising: a remote control including means for controlling functions of the video display system (fig. 1); means for reading data from a portable data repository using the remote control (127 in fig. 7); means for transferring the read data from the remote control to other portions of the video display system (129,131 in fig. 7); and means for transferring the read data from the video display system to a communications network (162 in fig. 7).

Application/Control Number: 10/661,149 Page 5

Art Unit: 2674

With respect to claim 31, Erlin discloses, the secure transaction system of claim 30 (see above), further including means for encrypting the read data (133 in fig. 7).

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cory et al. (US 6,040,829) in view of Claassen (US 6,069,672).

With respect to claim 3, Cory discloses, the remote control of claim 1 (see above).

Cory does not expressly disclose, wherein the transducer is an optical transducer.

Claassen discloses using an optical data medium (col. 2, lines 25-31). Use of such a medium would inherently require an optical transducer to read the optical data.

Claassen and Cory are analogous art because they are from the same field of endeavor namely remote controls with card readers integrated into them.

At the time of the invention it would have been obvious to use an optical data medium, taught by Claassen, in the remote control system of Cory.

The motivation for doing so would have been, that optical data medium is typically cheaper to produce than magnetic stripe cards and other computer chip cards.

Art Unit: 2674

Therefore it would have been obvious to combine Claassen and Cory for the benefit of lessened cost to obtain the invention as specified in claim 3.

6. Claims 6-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cory et al. (US 6,040,829) in view of Erlin (US 5,973,756).

With respect to claim 6, Croy discloses, the remote control of claim 1 (see above), as well as establishing an encrypted communication path using conventional ciphered communication (col. 6, lines 25-32).

Croy does not expressly disclose a logic circuit configured to encrypt the read data.

Erlin discloses a logic circuit (133 in fig. 7) to encrypt an IR signal (col. 4, lines 39-41), which contains data read from a portable data repository (col. 3, lines 33-38).

Erlin and Croy are analogous art because they are both from the same field of endeavor namely, remote controls with additional card reader functions.

At the time of the invention it would have been obvious to encrypt the sensitive data, of Croy, with a logic circuit, as taught be Erlin.

The motivation for doing so would have been enable the remote device to take part in modern home-banking business (Croy, col. 6, lines 30-32).

Therefore it would have been obvious to combine Croy with Erlin for the benefit of enabling home-banking to obtain the invention as specified in claim 6.

With respect to claim 7, Croy and Erlin disclose, the remote control of claim 6 (see above).

Art Unit: 2674

As shown above in claim 6, encrypting sensitive information would have been obvious. Further Croy discloses sending device identification data (col. 6, lines 37-42) over the secure communications link, thus it is clear that it would have been obvious to one of ordinary skill in the art to encrypt the device identification data as well, for the same motivation stated in claim 6.

With respect to claims 8-10, Croy and Erlin disclose, the remote control of claim 7 (see above).

Erlin further discloses, wherein the data read from the portable data repository is an account number, a credit card number, and user identifying data (col. 5, lines 28-33).

With respect to claim 11, Croy and Erlin disclose, the remote control of claim 6 (see above).

Erlin further discloses using the Data Encryption Standard (DES) (col. 8, lines 41-59) which inherently includes means for generating a pseudorandom number.

With respect to claims 12 and 13, Croy discloses, the remote control of claim 1 (see above).

Croy does not expressly disclose, further including an x-y pointer that is a trackball.

Erlin discloses a trackball configured as an x-y pointer (72 in fig. 5).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the x-y pointer trackball taught by Erlin in the remote controller of Croy.

The motivation for doing so would have been to allow for a faster interface method, versus continual button pushing, when using on-screen displays.

Art Unit: 2674

Therefore it would have been obvious to combine Erlin with Croy for the benefit of a faster interface method to obtain the invention as specified in claims 12 and 13.

With respect to claim 14, Croy discloses, a transaction system comprising: a video display system including, a display (140 in fig. 1), a remote control configured to control functions of the video display system (fig. 2), the remote control having

- a) a mechanical data entry including a power control and channel control (on/off switch in fig. 3a; col. 17, lines 16-18),
- b) a multi-bit data sensor including a transducer and configured to read data from a portable data repository (260 in fig. 2, also note col. 5, lines 35-45; reading of data as described inherently requires a transducer of some sort), and
- c) a first interface (210 in fig. 2) to transfer data from the remote control to other portions of the video display system;

memory configured to store device identification data (col. 4, lines 43-46); and a second interface configured to transfer data to a communications network (136 in fig. 1).

Croy does not expressly disclose that the data transmitted over the interfaces is the data read from the portable data repository.

Erlin discloses, transmitting data that has been read from a portable data repository (col. 5, lines 18-33).

At the time of the invention it would have been obvious to one of ordinary skill in the art to send data that is stored on the portable data card of Croy as taught by Erlin.

Art Unit: 2674

The motivation for doing so would have been to more quickly facilitate the input of data to other portions of the display system, by swiping a card and pressing enter, versus manually entering credit card information.

Therefore it would have been obvious to combine Croy with Erlin for the benefit of convenience to the user to obtain the invention as specified in claim 14.

With respect to claim 15, Croy and Erlin disclose, the transaction system of claim 14 (see above).

Both Croy and Erlin further disclose including a portable data repository as part of a transaction system (Croy; col. 5, lines 54-56--Erlin; 30,32 in fig. 1).

With respect to claim 16, Croy and Erlin disclose, the transaction system of claim 15 (see above).

Erlin further discloses including in the remote control a logic circuit (133 in fig. 7) to encrypt an IR signal (col. 4, lines 39-41), which contains data read from a portable data repository (col. 3, lines 33-38).

With respect to claim 17, Croy and Erlin disclose, the transaction system of claim 14 (see above). Croy further discloses establishing an encrypted communication path with at least one known central server (col. 6, lines 25-27), which inherently must have means to decrypt data.

Also Erlin further discloses, networked servers that decrypt and re-encrypt the data read (see fig. 10).

With respect to claim 18, Croy and Erlin disclose, the transaction system of claim 14 (see above).

Art Unit: 2674

Croy further discloses, wherein the display is configured for use in programming the remote control (col. 4, lines 47-58).

With respect to claim 19, Croy and Erlin disclose, the transaction system of claim 14 (see above).

Croy further discloses wherein the remote control is configured to transmit programming instructions to the display (col. 4, lines 62-65, configuration information is a form of programming instructions).

7. Claims 23-24 and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erlin (US 5,973,756) in view of Cory et al. (US 6,040,829).

With respect to claim 23, Erlin discloses, the method of claim 20 (see above).

Erlin does not expressly disclose, transferring device identification data from the remote control to the third party.

Croy discloses transferring device identification data (col. 4, lines 43-46) to a third party (col. 6, lines 22-33).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include device identification data, as taught by Croy, in data of Erlin transmitted to the third party.

The motivation for doing so would have been for more security (Croy; col. 5, lines 65-67).

Therefore it would have been obvious to combine Croy with Erlin for the benefit of added security to obtain the invention as specified in claim 23.

Art Unit: 2674

With respect to claim 24, Erlin and Croy disclose, the method of claim 23 (see above).

Croy further discloses that the device identification is configured to identify the remote control (col. 4, lines 43-46).

With respect to claim 25, Erlin and Croy disclose the method of claim 23 (see above).

Croy further discloses, determining, using the device identification data, a credit card authorized to perform secure transactions (col. 6, lines 38-43, discloses determining a user credit limit based on the device and user ID, which is equivalent to determining if the credit card is authorized to perform the secure transaction).

With respect to claim 32, Erlin discloses, a video display system comprising, a remote control configured to control functions of the video display system (fig. 1),

the remote control having at least

- a mechanical data entry including a power control, a volume control or a channel control (18, 23, 16 in fig. 1),
- a first interface configured to transfer data entered by a user from the remote control (129, 131 in fig. 7), and configured to receive data (130, 132 in fig. 7), and

memory configured to store the received data (124 in fig. 7);

a video display configured to display a menu responsive to the data transferred from the remote control (figs. 6a-h, and 9), configured for the user to select a number or a letter from the menu (amount in fig. 9); and

Art Unit: 2674

a second interface configured to transfer data (162 in fig. 7) from the video display system to a communications network (also see fig. 10).

Erlin does not expressly disclose that the video display transfers the selected number or letter to the remote control where it is stored in memory.

Cory discloses, loading cash onto a smart card (Col. 5, lines 46-56) as one of the numerous services possible with the inclusion of smart cards in the invention. In order for "loading cash onto a card" to be viable there inherently have to be some means which store the dollar amount that is available in the card.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the on-screen menu of Erlin (fig. 9) to load cash onto a portable data card in a remote control as taught by Cory.

The motivation for doing so would have been to enable users of cash cards to increase the amount of money on their cards without visiting a proprietary card location.

Therefore it would have been obvious to combine Cory with Erlin for the benefit of user convenience to obtain the invention as specified in claim 32.

With respect to claim 33, Cory and Erlin disclose, the video display system of claim 32 (see above).

Cory further discloses, including memory configured to store device identification data (col. 4, lines 43-46).

For motivation and obviousness statement see above claims which recite an identical limitation.

Art Unit: 2674

With respect to claim 34, Cory and Erlin disclose, the video display system of claim 33 (see above).

Cory further discloses, wherein the memory is configured to store device identification data is included in the video display (col. 4, lines 38-43).

With respect to claim 35, Cory and Erlin disclose, the video display system of claim 33 (see above).

Cory further discloses, wherein the memory configured to store device identification data is included in the remote control (col. 4, lines 43-46).

With respect to claims 36 and 37, Cory and Erlin disclose, the video display system of claim 32 (see above).

Erlin further discloses, wherein the data stored in the memory includes credit card and address data (col. 4, lines 19-25; and col. 5, lines 28-33).

With respect to claim 38, Erlin discloses, the video display system of claim 32 (see above).

Erlin further discloses, a multi-bit data sensor (127 in fig. 7) configured to read data from a data repository for storage in the memory (col. 4, lines 19-25).

#### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Will Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 8:00 - 4:00.

Application/Control Number: 10/661,149 Page 14

Art Unit: 2674

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

1/3/06 wlb PATRICK N. EDOUARD
PATRICK N. EDOUARD
PATRICK N. EDOUARD
PATRICK N. EDOUARD
PATRICK N. EDOUARD